Small Business Economic Impact Statement 2012 International Building Code Prepared by State Building Code Council, July 10, 2012 Executive Summary Impact on small business

The Washington State Building Code Council (SBCC) is filing a proposed rule to adopt the updated 2012 edition of the International Building Code (IBC) (WAC51-50). Since 1985 the state building code council has been responsible to update to new editions of the building code. RCW19.27.074 The IBC is updated every three years by the International Code Council (ICC). The model code development process of updating code editions by the model code organization involves interest groups within the design and construction industry and from governmental

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The 2012 IBC contains about 160 significant changes from the 2009 IBC. According to the Proposed changes to the 2009 Edition of the IBC, published by the ICC, less than five per cent of the significant amendments result in an increase in cost of construction. The primary effect of the amendments is improvement and clarification of the code. The objective of the amendments is to improve the building regulatory system.

The SBCC appointed a technical advisory group (TAG) to review the 2012 IBC significant changes, the applicability of the existing statewide amendments, and 12 new proposed state amendments. The TAG included all sectors of the construction industry and regulatory community, including small businesses. All TAG meetings are open to the public and small businesses are notified and participate in the review.

The update will result in some cost outlay for some small businesses in construction industries for specific building projects, for a transition period. Other small businesses would see an increase in revenue. The TAG identified specific amendments with a cost impact and in most cases modified the code to reduce the impact while maintaining the intent of the code to provide a safe and accessible building. Where the SBCC found the cost of compliance for small businesses to be disproportionate, the proposed rule mitigates the cost. The proposed rule includes a definition of small business and provides exceptions for compliance with the updated regulation.

The cost impact on small businesses compared to the largest businesses in the state will not be disproportionate.

The SBCC has found that in a competitive bidding climate, construction costs per square foot will be constant, independent of the size of firm bidding the work. The permit process, including plan review and inspection costs of compliance to businesses in the construction industry will not be affected by adoption of the new edition.

The overall impact would be positive, because a majority of the amendments in the new edition either reduce requirements or provide more clarity, reducing review and approval times. The degree of impact diminishes during the code cycle as rules become familiar and construction practices adjust and are accepted.

The rules are anticipated to be job neutral, although there would be some temporary work for installation jobs for certain trades people.

Section I: Introduction/Compliance with the Rules

The proposed rule adopts the 2012 edition of the International Building Code (IBC). The 2009 IBC with state amendments is currently in effect. (WAC 51-50).

State amendments to the code address specific issues, for example:

- Washington state facility licensing requirements
- Added allowable story for wood framed buildings
- Clarification of egress requirements
- Correction of engineering standards for concrete

For a complete list of all state amendments see this link.

http://apps.leg.wa.gov/wac/default.aspx?cite=51-50

The amendments add flexibility and clarity to the code and coordinate rules, and represent a savings for small business building owners and operators.

The 2012 edition contains about 160 significant revisions from the current 2009 edition of the building code. The revisions address primarily editorial changes to clarify the code and reduce the reporting, recordkeeping and other compliance requirements. The building code currently in effect requires issuance of a building permit for construction projects, review and approval of plans, and field inspections. The new edition of the building code primarily improves the building regulatory process by resolving inconsistencies and problems with previous editions. Where actual experience in installation has demonstrated code requirements add no benefit, the requirements are reduced or deleted.

The 2012 IBC does contain significant modifications, requiring additional expenditure by building owners to maintain compliance. The SBCC identified these new provisions:

- 1. High Rise building Fire Service Access Elevators. The 2012 IBC requires an additional fire service access elevator in new high rise construction.
- 2. Exterior combustible projection protection. The 2012 IBC adds protection requirements for some projections on new buildings.
- 3. Wired glass. The 2012 IBC requires such glazing to be tested to applicable safety standards.
- 4. Vertical and lateral flame propagation. The 2012 IBC requires testing for exterior walls containing a combustible water-resistive barrier.
- 5. Photovoltaic modules/shingles. The 2012 IBC adds guidance for installation of photovoltaic systems.

Section II: Compliance Costs for Washington Businesses

Washington businesses will incur costs to purchase new code books and for training. The 2012 edition of the IBC costs \$88 on CD and \$98.75 for a loose leaf binder. The codes are also available to view online at no cost. There is also an online subscription service available, at a per user cost.

The costs for compliance with the 2012 IBC are specific to the project and the plan.

1) 2012 IBC section 403.6.1 High Rise Building Fire Service Access Elevators.

The change to this section of the 2012 IBC requires a minimum of two (instead of one) 3500 pound weight capacity fire service access elevators in high rise buildings with an occupied floor more than 120 feet above the lowest level of fire department access. The intent of this code change is to provide a compromise that addresses the fire service access elevators that are required in a building based on the size and capacity of the elevators and not strictly the number of elevators. Assuming an upgrade to a 3500 pound elevator, additional costs may include an increase in shaft dimension, and addition of fire service controls. Labor costs would be comparable to installation of a standard size elevator cab.

The total estimated additional cost for an upgrade to a stretcher cab in a ten story building would be \$50,000, assuming the following cost factors:

Foundation/pit \$12,000

Cab and associated motor	\$8,000
Additional shaft wall (10 stories)	\$20,000
Additional HVAC (shaft pressurization/elect., etc.)	\$10,000

2) 2012 IBC section 705.2.3 Exterior combustible projection protection

Adds protection requirements for some projections where some openings are otherwise required to be protected. Some additional materials and labor would be required to install a fire protective layer on come projections.

3) 2012 IBC section 716.6.4 Wired glass

The 2012 IBC deletes an exception previously allowed for wired glass in fire rated assemblies. The new code requires that wired glass be tested to applicable safety standards, where installed in fire assemblies in hazardous locations. This will impact the sales of untested wire glass product.

4) 2012 IBC section 1403.5 Vertical and lateral flame propagation

The 2012 IBC requires a flame-spread test of exterior wall assemblies where combustible water-resistive barriers are used in Type I, II, III and IV buildings over 40 feet in height. The proposed rule provides an exception to mitigate the potential impact of this provision.

2012 IBC section 1507.17 Photovoltaic modules/shingles

The 2012 IBC adds guidance for installation of photovoltaic systems.

Section III: Analysis of Proportionate Impact on Small Businesses

The impact on small businesses compared to the largest businesses in the state will not be disproportionate.

The cost of compliance is a proportionate incremental cost, in relation to hours of labor, or costs per employee. The incremental cost of meeting the 2012 IBC, will have a proportionate impact on building and construction businesses. Building projects tend to be unique to type of construction, building type, building site, as well as size of the project. Costs for design and construction will be evenly distributed among the general and sub contractors. Further, construction industry businesses fit primarily into the category of small business. Where an industry has a significant number of large businesses, the costs of compliance for large businesses are proportional to the number of employees in any size business.

Section IV: Small Business Involvement and Impact Reduction Efforts Actions Taken to Reduce the Impact of the Rule on Small Businesses

The TAG identified specific amendments with a cost impact and modified the code to reduce the impact while maintaining the intent of the code. Where the SBCC found the cost of compliance for small businesses to be disproportionate, the proposed rule mitigates the cost. The proposed rule includes a definition of small business and provides exceptions for compliance with the updated regulation.

Involvement of Small Business in the Development of the Proposed Rules

The SBCC appointed a Technical Advisory Group (TAG) to represent construction industry businesses and organizations. In accordance with SBCC bylaws, all TAG meetings are open to the public and small businesses are notified and participate in the review.

For a directory of TAG members see https://fortress.wa.gov/ga/apps/sbcc/Page.aspx?nid=117

Section V: Number of affected businesses in Washington: WAC 51-50

Type of business	NAICS	# IN	#IN STATE
	CODE #	STATE	(50 OR MORE
		(UP TO 49	Employees)

		Employees)	
Homebuilders	236115	3985	12
Multi Family Housing			
Construction	236116	77	0
Residential Remodelers			
	236118	3468	1
Industrial Building Construction			
	236210	89	6
Commercial and Institutional			
Building Construction	236220	1305	40
Poured concrete foundation and			
structure contractor	238110	1028	3
Roofing Contractors			
	238160	973	7
Wood Window and Door			
Manufacturing	321911	39	2
Architects	541310	602	16
Engineers	541330	1665	96

Section VI: Jobs created or lost as a result of these Rules:

The adoption of the latest code edition is not expected to significantly impact the number of jobs in the construction industry. These rules are likely to be job neutral overall, i.e., they will not result in any job gains or losses. The scheduled effective date of the new edition is July 1, 2013. Building permits issued prior to that date will be vested under the 2009 building code. Permits issued for projects under the 2012 code edition will start with the 2014 construction season.

The construction industry continues to experience slow growth. Employment in all sectors impacts activity in the construction sector. According to <u>Washington Occupational Employment Projections</u>, posted by the Department of Employment Security, the total number of construction trade workers statewide was 124,612 in the second quarter of 2011. There is an estimated increase of 0.6% by the second quarter of 2013, for a total number of construction trade workers of 126,093. Specialty trades show a similar pattern of slow growth by the second quarter of 2013:

Carpenters 33,821 +0.4%
Construction laborers 16,592 +0.5%
Plumbers, pipefitters 8,885 +0.3%

Some sectors are expected to experience slightly more positive growth. The number of engineers employed in Washington is expected to grow in this same period about 2.2% to 54,769. The long term projection shows a 2.3% growth in the construction industry from 2010 to 2015, adding 16,800 jobs for a total of 156,900 employed in the industry by 2015.